to drive a rotary convertor to produce 230 V. A.c. for the operation of the audiometer, its calibrator and the Chiron lamp; additional outlet sockets are provided for a soldering iron or other equipment; (2) to drive a vibratory transformer to produce 90 V. A.c. for the six 15-W. fluorescent lights—four in the ante-chamber and two in the test chamber; (3) direct, for the operation of the 24-V. D.C. extractor fan.

A 360-W. petrol-driven charging set for the accumulators is also installed. This charging set, the rotary transformer, interference suppressors and the vibratory transformer are all carried with the accumulators on the platform between the chamber itself and the vehicle cab. All are fitted with weather-proof metal covers, while that of the rotary convertor is also lined with sound-absorbent material.

Beneath this platform distilled water for the accumulators, a test meter and all small tools are carried in two rubber-lined weather-proof lockers.

## **OBITUARIES**

## Dr. B. Mouat Jones

The announcement of the death of Dr. B. Mouat Jones on September 11 at the age of seventy came as a great shock to all who knew him. Since his retirement in 1948 he had led a most active life, and right up to the last he seemed to be in better physical condition than most men ten years his junior.

Educated at Dulwich and at Balliol College, Oxford, where in 1905 he took a first-class honours degree in chemistry, mineralogy and crystallography, Mouat Jones followed a brief appointment at the Imperial Institute by a seven-year sojourn in India as professor of chemistry at Government College, Lahore. In 1913 he returned to England to become assistant professor of chemistry at the Imperial College of Science and Technology; but the outbreak of war put an end to this phase of his career and he enlisted at once as a private in the London Scottish. It was not long, however, before Prof. W. Watson selected him to become his assistant director at the Central Laboratory G.H.Q., in France, there to participate in countering the German onslaught of gas warfare. In this, where speed was of paramount importance, Mouat Jones was remarkably successful; and worthy of special mention in this connexion were his devising of methods of protection from phosgene gas and his rapid identification of what by a curious accident became known as 'mustard' gas. By the end of the War he was the director in charge of the laboratory with the rank of lieutenant-colonel, and with the D.S.O. and three mentions in dispatches to his credit.

Returning to civilian life, he held for a short period the chair of chemistry at Aberystwyth; but in 1920 he was elected principal of the Manchester College of Technology, where he spent the next seventeen years of his life. The outstanding success with which he held this office can only be properly appreciated by those thoroughly acquainted with the nature of his task, and with the form of the concordat between the University and the City which established the College as the Faculty of Technology in the University of Manchester. It is perhaps only necessary to say here that the success with which harmonious working relationships were established among all those concerned was due in a very large measure to the impact and influence of those personal qualities with which

Mouat Jones was so exceptionally gifted: high moral courage and integrity, firmness of purpose, human understanding and a strong sense of humour, and perhaps, above all, an unshakeable faith in the future of technology as a vital part of the university system of Great Britain.

Being by nature modest and retiring, he accepted with some trepidation the invitation in 1938 to succeed Sir James Baillie as vice-chancellor of the University of Leeds; but there again the same personal qualities carried him through an exacting ten years term of office with conspicuous success. Not only had he to guide the destiny of the University through the difficult war-time years, but also by wise judgment and strict impartiality to keep the University on an even keel during the even more difficult years of rapid expansion which followed.

In addition to the formal duties of his several offices, and before and after his retirement, Mouat Jones served the State, the Commonwealth and his fellow-men in a great variety of ways-too many to detail in this short notice; but by all those who had the good fortune to know him he will be remembered not so much by what he did as for what he was. He had his enemies, as nearly all men must who hold high office; but his friends and admirers were legion. Though not naturally gregarious, he was one of the most approachable of men and won the high regard and warm affection of an astonishingly large number of those of all degrees who in one way or another came under the influence of his personality. By those who met him casually at public dinners and similar functions, he will be long remembered as one of the wittiest and most accomplished of public speakers; but to his one-time colleagues and associates and also to his innumerable old students now spread over the four quarters of the globe, his passing is that of a trusted and irreplaceable friend. W. E. MORTON

## The Duke of Bedford

The twelfth Duke of Bedford, whose death at the age of sixty-four has occurred, had other activities than those connected with Evangelical Christianity, social work, monetary reform and the kindred subjects by which he was best known to the public. His interest in zoology was of the keenest. His father and mother left at Woburn a fine collection of deer, bison, waterfowl, etc., and this collection he not only maintained but also enhanced. He knew his animals intimately, as was apparent when he took me around the park in August last. We paused to look at a number of red deer. He pointed out the different stags and told me their ages and details of their careers.

The unique herd of Père David's deer were his special delight. This large donkey-like species, which is exterminated in its native China, is represented only by the three or four hundred animals at Woburn and a few the Duke sent elsewhere. There are no others in the world. It is thanks to the Duke of Bedford it survives. He was also proud of his European bison and showed me with delight the new bull he had obtained with much trouble from Sweden. Seeing how precarious is the position of this species on the Continent, zoologists must again be grateful for the sanctuary afforded the individuals at Woburn.

The Duke of Bedford was also an ornithologist, having made a life study of the parrots and allied birds. Prior to the War he had a remarkable collection of such birds; but war-time difficulties led